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Brent J. Cornell

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EXAMINER

KWIECINSKI, RYAN D

ART UNIT

PAPER NUMBER

3635

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/785,241

Applicant(s)

CORNELL, BRENT J.

Examiner

Ryan D. Kwiecinski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-54 are pending and have been examined in this office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 8-9, 12, 24,28, 30, 35, and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 4,015,382 to Noyes.

Claim 1:

Noyes teaches a jamb assembly, adapted for use in a door frame, and comprising:

(a) an elongate jamb (11, Fig.3) having a length, and comprising an inner flange (17, Fig.3) having a first proximal edge (corner between 17 and 11, Fig.3) and a first distal edge (19, Fig.3), an outer flange (18, Fig.3) having a second proximal edge (corner between 18 and 35, Fig.3) and a second distal edge (20, Fig.3), and a jamb face plate (16,34, Fig.3) extending between said inner flange at the first proximal edge and said outer flange at the second proximal edge, said elongate jamb defining an elongate cavity therein and extending along the length of said elongate jamb, extending from at or adjacent an inner surface of said

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jamb face plate to an elongate opening proximate the first and second distal edges of said inner and outer flanges (opening surrounded by the c-shaped channel member, Fig.3), the elongate opening being defined along the length of said elongate jamb between said inner and outer flanges; and

(b) as a separate and distinct element, at least one elongate reinforcing insert (23, Fig.3), having a length, received in the elongate cavity and extending at least to the elongate opening, said reinforcing insert operating to increase stiffness of said jamb assembly.

Claim 8:

Noyes teaches a jamb assembly as in Claim 1, Noyes also teaches further comprising at least first and second spacing blocks (Column 2, lines 13-16) disposed between said insert and said jamb face plate.

Claim 9:

Noyes teaches a jamb assembly as in claim 8, Noyes also teaches said spacing blocks collectively providing a mounting (32, Fig.3) surface, which receives a corresponding surface (25, Fig.3) of said insert.

Claim 12:

Noyes teaches a jamb assembly as in claim 8 wherein said spacing blocks collectively provide a generally planar mounting surface (32, Fig.3), which receives a corresponding surface (25, Fig.3) of said insert.

Claim 20:

Noyes teaches a jamb assembly as in claim 8 wherein said spacing blocks (32, Fig.3) extend from said inner flange to said outer flange.

Claims 24 and 35:

Regarding claim 24, Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike jamb assembly comprising a jamb assembly as in claim 1. Noyes also teaches a building (Abstract) per claim 35 comprising a doorway, and a door assembly in said doorway, said door assembly comprising a door assembly as in claim 24.

The abstract teaches the use of a door frame made up of the jamb sections and the header section installed in a rough door opening. A rough door opening would then be present inside of a building.

Claim 28:

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Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike jamb assembly comprising a jamb assembly as in claim 8.

Claim 30:

Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike jamb assembly comprising a jamb assembly as in claim 12.

Claims 38 and 39:

Noyes teaches a building (Abstract) comprising a doorway, and a door assembly in said doorway, said door assembly comprising a door assembly as in claim 28 per claim 38 and as in claim 30 per claim 39.

Claim 54 is rejected under 35 U.S.C. 102(e) as being anticipated by US Pub 2003/0068211 A1 to Bailey.

Claim 54:

A combination fastener comprising a fastener body, and as a separate and distinct element, a fastener head,

said fastener body (60, Fig.3) having a first set of threads (61, Fig.3) having a first thread configuration extending from a first end of said fastener body, and a second set of threads (62, Fig.3) having a second thread configuration extending from a second opposing end of said fastener body,

said fastener head (10, Fig.1) comprising a bore (42,44, Fig.1) extending longitudinally therealong from a first end thereof, said bore comprising inner threads corresponding to the second thread configuration (44, Fig.1), and a stop disposed in said bore (70, Fig.4a), and toward a second end of said bore from said first end, such that the fastener head can be threaded onto the fastener body, and in cooperation with said stop in said head, can thereby be used to drive said fastener, and to accordingly fasten said fastener to a substrate, and wherein, once said fastener body is driven into a substrate using said head as a driving tool, said fastener head is ineffective to remove said fastener body from such substrate.

The claim language "such that...substrate." (claim 54, lines 10-15) comprises a statement of intended use that does not further limit the structural features of the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 10-11, 25, 29 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 5,233,802 to Rogers.

Claims 2-3:

Noyes teaches a jamb assembly as in Claim 1, wherein said elongate reinforcing insert interfaces either directly or indirectly (32, Fig.3) with said elongate jamb, but does not teach wherein the insert interfaces the jamb at at least three spatially-displaced points per claim 2. Rogers teaches wherein the wherein said elongate reinforcing insert interfaces either directly or indirectly with said elongate jamb at at least three (68, Fig.1) spatially-displaced points at a given locus along the length of said elongate jamb.

Regarding claim 3, Noyes also does not teach wherein the at least three interface locations occur along substantially all of the common lengths of said insert and said jamb. Rogers teaches wherein the at least three interface locations (68, Fig. 1) occur along substantially all of the common lengths of said insert and said jamb.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have inserted spacing means into the jamb channel in

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order to further reinforce the door jamb as well as create space for door interfacing hardware to be installed inside of the door jamb. The use of door interfacing hardware is critical to the installation of a door assembly into a door opening. Also it is obvious to install as many spacing members as necessary in order to provide an even secure mounting surface for the reinforcing insert into the jamb. Therefore it is extremely obvious to use at least three spacers inside of the door frame.

Claim 10:

Noyes and Rogers teach the jamb assembly as in Claim 8, Rogers teaches said spacing blocks being spaced from each other (68, Fig.1) along the length of said jamb.

Claim 11:

Noyes and Rogers teach as in Claim 2, Noyes teaches further comprising at least first and second spacing blocks disposed between said insert and said jamb face plate (32, Fig.3), said spacing blocks collectively providing a mounting surface which receives a corresponding surface of said insert, whereby said spacing blocks serve as indirect interfaces between said insert and said jamb face plate.

Claims 25 and 36:

Regarding claim 25, Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike jamb assembly comprising a jamb assembly as in claim 3, which is taught by Noyes and Rogers above. Noyes also teaches a building (Abstract) per claim 35 comprising a doorway, and a door assembly in said doorway, said door assembly comprising a door assembly as in claim 24, also taught by Noyes and Rogers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created a door assembly out of individual door jambs. It would have also been obvious to have installed the door assembly into a doorway opening in a building since that is the purpose of a door assembly.

Claim 29:

Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike jamb assembly comprising a jamb assembly as in claim 10, taught by Noyes and Rogers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created a door assembly out of individual door

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jamb. The obvious purpose of individual door jambs is to construct a door assembly.

Claims 4-7, 26-27, 37, 46-47, and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 3,591,985 to Coppins.

Claims 4-5:

Noyes teaches a jamb assembly as in claim 1, wherein a width of said elongate reinforcing insert between a first element of said inner flange and a first element of said outer flange extends a distance "D" generally aligned with said inner and outer flanges (the distance from 21 to 22 of the insert, Fig.3), Noyes does not teach filling a substantial portion of the elongate cavity between said jamb face plate and the elongate opening per claim 4. Coppins teaches filling a substantial portion (the solid core insert 2, Fig. 2) of the elongate cavity between said jamb face plate and the elongate cavity between said jamb face plate and the elongate opening. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a solid insert member to provide improved structural strength to the door jamb.

Regarding claim 5, Noyes teaches a jamb assembly as in claim 1, but does not teach wherein said elongate insert fills substantially all space in the

cavity between an element of said inner flange and an element of said outer flange, and fills a substantial portion of all space between elongate opening and said jamb face plate. Coppins teaches wherein said elongate insert fills substantially all space in the cavity between an element of said inner flange and an element of said outer flange, and fills a substantial portion of all space between elongate opening and said jamb face plate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a solid insert member to provide improved structural strength to the door jamb.

Claims 6-7:

Noyes and Coppins teach a jamb assembly as in claim 4 per claim 6 and a jamb assembly as in claim 5 per claim 7, Noyes also teaches including a void space (the space between 28 and 18, Fig.3) in the elongate cavity between said insert (23, Fig.3) and a second element (21,22, Fig.3) of at least one of said inner flange and said outer flange.

Claims 26-27:

Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike

jamb assembly comprising a jamb assembly as in claim 4 per claim 26 and claim 5 per claim 27, which are both taught by Noyes and Coppins.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created a door assembly out of individual door jambs. The obvious purpose of individual door jambs is to construct a door assembly.

Claim 37:

Noyes teaches a building (Abstract) comprising a doorway, and a door assembly in said doorway, said door assembly comprising a door assembly as in claim 26, which is taught by Noyes and Coppins.

It is obvious to one of ordinary skill in the art at the time the invention was made to have installed Noyes' door assembly into a doorway in a building.

Installing a door assembly into a building doorway is very well known.

Claim 46:

Noyes teaches a building doorway (Abstract), and a door assembly mounted in said doorway, said doorway being defined by a rough opening and building framing members defining the rough opening,

said door assembly comprising a plurality of elongate jambs (Column 1, lines 57-65), each having a length, and comprising an inner flange (17, Fig.3), an outer flange (18, Fig.3), and a jamb face plate (16,34, Fig.3), and an elongate

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cavity therein extending along the length of said elongate jamb, and defined between said inner and outer flanges and outwardly of said jamb face plate to an elongate opening into the elongate cavity,

at least one of said elongate jambs further comprising, as a separate and distinct element, at least one elongate reinforcing insert (23, Fig.3) received in the elongate cavity and extending at least to the elongate opening.

Noyes does not teach said rough opening being defined by a single thickness of structural member used to define a frame of said building in facing relationship with said at least one elongate jamb which comprises said reinforcing insert, and wherein a double thickness of said structural member would normally be used to define said rough opening in facing relationship with said at least one elongate jamb, said elongate insert in said door assembly being structurally mounted to the respective said single thickness structural member so as to provide substantially the same structural strength as the normal double thickness rough opening framing structure. Coppins teaches said rough opening being defined by a single thickness of structural member (40, Fig.1) used to define a frame of said building in facing relationship with said at least one elongate jamb which comprises said reinforcing insert, and wherein a double thickness of said structural member would normally be used to define said rough opening in facing relationship with said at least one elongate jamb, said elongate insert in said door assembly being structurally mounted (Fig.2 and Fig.5) to the respective said single thickness structural member so as to provide substantially

the same structural strength as the normal double thickness rough opening framing structure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have installed Noyes' door frame into a building doorway which was constructed from a single thickness structural member. When combined the door jamb and the structural member will act as one and provide the usual double thickness of an ordinary doorway. It would have been obvious to eliminate an additional structural member from the doorway in order to form the usual thickness of a building doorway and to prevent the use of unnecessary materials.

Claim 47:

Noyes teaches a building (Abstract) comprising a doorway as in claim 46, taught by Noyes and Coppins.

It would have been obvious to one of ordinary skill in the art to construct a building doorway in a building. It would also be obvious to install Noyes' and Coppins' doorway into the building doorway. It is well known that a building doorway must be constructed inside of a building.

Claim 49:

Noyes and Coppins teach a building doorway, and a door assembly mounted in said doorway opening as in claim 46; Noyes teaches said at least

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one elongate jamb (11, Fig.3) comprising inner and outer flanges (17,18, Fig.3), connected to each other by a jamb face plate (16,34, Fig.3) wherein a width of said elongate reinforcing insert between a first element of said inner flange and a first element of said outer flange extends a distance "D" generally aligned with said inner and outer flanges (between 17 and 18, Fig.3). Noyes does not teach thereby filling a substantial portion of the elongate cavity between said jamb face plate and the elongate opening. Coppins teaches thereby filling a substantial portion (2, Fig.2) of the elongate cavity between said jamb face plate and the elongate opening.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a solid insert member to provide improved structural strength to the door jamb.

Claim 50:

Noyes and Coppins teach a building doorway, and a door assembly mounted in said doorway opening as in claim 46, Noyes also teaches said at least one elongate jamb (11, Fig.3) comprising inner and outer flanges (17,18, Fig.3), connected to each other by a jamb face plate (16,34, Fig.3), further comprising at least first and second spacing blocks (Column 2, lines 13-16) disposed between said insert and said jamb face plate (32, Fig.3), said spacing

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blocks providing a mounting surface (32, Fig.3) which receives a corresponding surface of said insert.

Claims 13,14 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 4,698,944 to Wilkins Jr.

Claims 13-14:

Noyes teaches a jamb assembly as in claim 1 per claim 13 and a jamb assembly as in claim 8 per claim 14, but does not teach further comprising a draw fastener which draws said insert toward said jamb face plate.

Wilkins Jr. teaches a draw fastener (40, Fig.3) which draws said insert toward said jamb face plate.

It would have been obvious to one of ordinary skill at the time the invention was made to have used a draw fastener to secure the insert to the jamb plate. Using a draw fastener is notoriously well known in securing items especially door frames and inserts.

Claim 31:

Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike

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jamb assembly comprising a jamb assembly as in claim 13, taught by Noyes and Wilkins Jr.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 5,233,802 to Rogers in view of USPN 4,698,944 to Wilkins Jr.

Claim 15:

Noyes and Rogers teach a jamb assembly as in claim 11, they do not teach further comprising a draw fastener which draws said insert toward said jamb face plate. Wilkins Jr. teaches further comprising a draw fastener (40, Fig.3) which draws said insert toward said jamb face plate.

It would have been obvious to one of ordinary skill at the time the invention was made to have used a draw fastener to secure the insert of Noyes' door jamb to the jamb plate. Using a draw fastener is notoriously well known in securing items especially door frames and inserts.

Claims 16, 18, 19, 32, 33, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 5,619,823 to Ruff et al.

Claim 16:

Noyes teaches a jamb assembly as in claim 8, but does not teach one or more elements of door interface hardware permanently mounted to said jamb, said door interface hardware having first thicknesses thereof extending away from said jamb face plate and toward the elongate opening, said spacing blocks collectively providing a mounting surface disposed generally between the elongate opening and said door interface hardware. Ruff et al. teaches one or more elements of door interface hardware (46,38, Fig.4, 58,54, Fig.6) permanently mounted (Column 4, lines 16-18, lines 37-40) to said jamb, said door interface hardware having first thicknesses thereof extending away from said jamb face plate and toward the elongate opening, said spacing blocks collectively providing a mounting surface disposed generally between the elongate opening and said door interface hardware.

It would have been obvious to add door interface hardware to the inside of the elongate jamb in order to provide the proper the proper hardware in order for a door to interact properly with the door jamb. It is also well known to reinforce an area that will be in contact with attachment means such as screws in order to prevent stresses from crack the surrounding areas. This application of reinforcement plates is well known in the art.

Claim 18:

Noyes and Ruff teach a jamb assembly as in claim 16, Ruff also teaches wherein said door interface hardware interrupts a de minimis portion of, and thereby extends through a de minimis area of, an imaginary plane defining the mounting surface (54, Fig.6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created door interface hardware that interrupted a very small part of the mounting plane. It would be obvious to have the door interface hardware follow the inside surface of the flanges of the jamb interrupting the mounting surface in a space that is ineffective in Noyes' door jamb. This interface hardware along the surface of the flange provides more surface contact and a better region to secure the hardware to the jamb by spot welding.

Claim 19:

Noyes teaches a jamb assembly as in claim 8, but does not teach a projected area of said jamb being defined from the direction of the elongate opening, said jamb assembly further comprising, in the elongate cavity, one or more elements of door interface hardware permanently mounted to said jamb, said spacing blocks and said door interface hardware occupying different portions of the projected area of said jamb. Ruff et al. teaches a projected area of said jamb being defined from the direction of the elongate opening, said jamb assembly further comprising, in the elongate cavity, one or more elements of

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door interface hardware (46,38, Fig.4, 58,54, Fig.6) permanently mounted (Column 4, lines 16-18, lines 37-40) to said jamb, said spacing blocks and said door interface hardware occupying different portions of the projected area of said jamb.

It would have been obvious to add door interface hardware to the inside of the elongate jamb in order to provide the proper the proper hardware in order for a door to interact properly with the door jamb. It is also well known to reinforce an area that will be in contact with attachment means such as screws in order to prevent stresses from crack the surrounding areas. This application of reinforcement plates is well known in the art.

Claim 32-33:

Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike jamb assembly comprising a jamb assembly as in claim 16 per claim 32 and claim 19 per claim 33, both taught by Noyes and Ruff et al.

Claim 40:

Noyes teaches a building (Abstract) comprising a doorway, and a door assembly in said doorway, said door assembly comprising a door assembly as in claim 32, taught by Noyes and Ruff et al.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 5,619,823 to Ruff et al. in view of USPN 4,698,944 to Wilkins Jr.

Claim 17:

Noyes and Ruff et al. teach a jamb assembly as in claim 16, they do not teach further comprising a draw fastener which draws said insert toward said jamb face plate. Wilkins Jr. teaches further comprising a draw fastener (40, Fig.3) which draws said insert toward said jamb face plate.

It would have been obvious to one of ordinary skill at the time the invention was made to have used a draw fastener to secure the insert of Noyes' door jamb to the jamb plate. Using a draw fastener is notoriously well known in securing items especially door frames and inserts.

Claims 21-22, 34, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 5,603,191 to Wu.

Claims 21-22:

Noyes teaches a jamb assembly as in claim 20 per claim 21 and a jamb assembly as in claim 8 per claim 22, but does not teach wherein said spacing blocks and/or the insert are friction fitted between said inner flange and said

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outer flange. Wu teaches wherein said spacing blocks and/or the insert are friction fitted (Column 2, lines 33-41) between said inner flange and said outer flange.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created spacing and blocks to be friction fitted in Noyes' door jamb in order to eliminate the use of attaching materials such as screws, bolts, or welding. It is well known to use friction fitting when spacing and location are necessary. It is obvious to use friction fitting wherever possible in order to eliminate the use of other materials, which in turn will save time and money.

Claim 34:

Noyes teaches a door assembly comprising a hinge jamb assembly (12, Fig.1), a strike jamb assembly (10, Fig.1), and a header jamb or header jamb assembly (14, Fig.1), at least one of said hinge jamb assembly and said strike jamb assembly comprising a jamb assembly as in claim 22, taught by Noyes and Wu.

Claim 41:

Noyes teaches a building (Abstract) comprising a doorway, and a door assembly in said doorway, said door assembly comprising a door assembly as in claim 34, taught by Noyes and Wu.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 4,698,944 to Wilkins Jr. in view of USPN 5,603,191 to Wu.

Claim 23:

Noyes and Wilkins Jr. teach a jamb assembly as in claim 13, but do not teach wherein both said spacing blocks and said insert are friction fitted between respective portions of said inner and outer flanges. Wu teaches wherein both said spacing blocks and said insert are friction fitted (Column 2, lines 33-41) between respective portions of said inner and outer flanges.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created spacing and blocks to be friction fitted in Noyes' door jamb in order to eliminate the use of attaching materials such as screws, bolts, or welding. It is well known to use friction fitting when spacing and location are necessary. It is obvious to use friction fitting wherever possible in order to eliminate the use of other materials, which in turn will save time and money.

Claims 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of US Pub. 2003/0068211 A1 to Bailey.

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Claims 42-43:

Noyes teaches a building as in claim 38 per claim 42 and a building as in claim 38 per claim 43 said door assembly being mounted in said doorway, but does not teach using a fastener with a detachable head, whereby manipulation of said head is ineffective to remove said fastener from said door assembly. Bailey teaches using a fastener with a detachable head (10, Fig.1).

The claim language describing the manipulation of the detachable head is considered functional language whenever it appears in the examined claims and is not given structural weight in the claim.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have mounted the door assembly in the doorway using a fastener with a detachable head. The use of fastener that can not be disturbed by manipulating the head is well known in the art. These fasteners provide a permanent type connection with the door frame structure.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 5,619,823 to Ruff et al. in view of US Pub. 2003/0068211 A1 to Bailey.

Claim 44:

Noyes and Ruff et al. teach a building as in claim 40, said door assembly being mounted in said doorway, but do not teach using a fastener having a

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detachable head, whereby manipulation of said head is ineffective to remove said fastener from said door assembly. Bailey teaches using a fastener having a detachable head (10, Fig.1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have mounted the door assembly in the doorway using a fastener with a detachable head. The use of fastener that can not be disturbed by manipulating the head is well known in the art. These fasteners provide a permanent type connection with the door frame structure:

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 5,603,191 to Wu in view of US Pub. 2003/0068211 A1 to Bailey.

Claim 45:

Noyes and Wu teach a building as in claim 40, said door assembly being mounted in said doorway, but do not teach using a fastener having a detachable head, whereby manipulation of said head is ineffective to remove said fastener from said door assembly. Bailey teaches using a fastener having a detachable head (10, Fig.1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have mounted the door assembly in the doorway using a fastener with a detachable head. The use of fastener that can not be disturbed

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by manipulating the head is well known in the art. These fasteners provide a permanent type connection with the door frame structure.

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 3,591,985 to Coppins in view of USPN 5,233,802 to Rogers.

Claim 48:

Noyes and Coppins teach a building doorway, and a door assembly mounted in said doorway opening as in claim 46, but do not teach said elongate reinforcing insert interfaces either directly or indirectly with said elongate jamb at at least three spatially-displaced points at a given locus along a length of said elongate jamb. Rogers teaches said elongate reinforcing insert interfaces either directly or indirectly with Noyes' elongate jamb at at least three spatially-displaced points (68, Fig.1) at a given locus along a length of said elongate jamb.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have inserted spacing means into the jamb channel in order to further reinforce the door jamb as well as create space for door interfacing hardware to be installed inside of the door jamb. The use of door interfacing hardware is critical to the installation of a door assembly into a door opening. Also it is obvious to install as many spacing members as necessary in order to provide an even secure mounting surface for the reinforcing insert into

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the jamb. Therefore it is extremely obvious to use at least three spacers inside of the door frame.

Claims 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 3,591,985 to Coppins in view of USPN 5,619,823 to Ruff et al.

Claim 51:

Noyes and Coppins teach a building doorway, and a door assembly mounted in said doorway opening as in Claim 46, said at least one elongate jamb comprising inner and outer flanges, connected to each other by a jamb face plate, they do not teach said jamb assembly further comprising, in the elongate cavity, one or more elements of door interface hardware permanently mounted to said jamb, said door interface hardware having first thicknesses thereof extending away from said jamb face plate and toward the elongate opening, said spacing blocks collectively providing a mounting surface disposed generally between the elongate opening and said door interface hardware.

Ruff et al. teaches said jamb assembly further comprising, in the elongate cavity, one or more elements of door interface hardware (46,38, Fig.4, 58,54, Fig.6) to said jamb permanently mounted (Column 4, lines 16-18, lines 37-40) to said jamb, said door interface hardware having first thicknesses thereof extending away from said jamb face plate and toward the elongate opening, said

spacing blocks collectively providing a mounting surface disposed generally between the elongate opening and said door interface hardware.

It would have been obvious to add door interface hardware to the inside of the elongate jamb in order to provide the proper the proper hardware in order for a door to interact properly with the door jamb. It is also well known to reinforce an area that will be in contact with attachment means such as screws in order to prevent stresses from crack the surrounding areas. This application of reinforcement plates is well known in the art.

Claim 52:

Noyes, Coppins, and Ruff et al. teach a building doorway, and a door assembly mounted in said doorway opening as in claim 51, Ruff also teaches wherein said door interface hardware interrupts a de minimis portion of, and thereby extends through a de minimis area of, an imaginary plane defining the mounting surface (54, Fig.6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created door interface hardware that interrupted a very small part of the mounting plane. It would be obvious to have the door interface hardware follow the inside surface of the flanges of the jamb interrupting the mounting surface in a space that is ineffective in Noyes' door jamb. This interface hardware along the surface of the flange provides more

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surface contact and a better region to secure the hardware to the jamb by spot welding.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,015,382 to Noyes in view of USPN 3,591,985 to Coppins in view of US Pub. 2003/0068211 A1 to Bailey.

Claim 53:

Noyes and Coppins teach a building doorway and a door assembly mounted in said doorway, as in claim 46, and at least one elongate jamb being secured to said building framing members which define a rough opening by at least one fastener, they do not teach wherein said fastener comprises a threaded fastener body, and a s a separate and distinct element, a fastener head.

Bailey teaches wherein said fastener comprises a threaded fastener body (60, Fig.3), and a separate and distinct element, a fastener head (10, Fig.1).

The remainder of claim 53 is functional language as does not provide structure to the claim.


It would have been obvious to one of ordinary skill in the art at the time the invention was made to have mounted the door assembly in the doorway using a fastener with a detachable head. The use of fastener that can not be disturbed by manipulating the head is well known in the art. These fasteners provide a permanent type connection with the door frame structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Kwiecinski whose telephone number is (571)272-5160. The examiner can normally be reached on 9 am - 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Naoko Slack can be reached on (571)272-6848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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